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UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA MISSOULA DIVISION

DEFENDERS OF WILDLIFE, et al.,	Case No. cv-09-77-M-DWM (Lead)
	cv-09-82-M-DWM
Plaintiffs,	(consolidated cases)
V.)
	STATEMENT OF UNDISPUTED
KEN SALAZAR, et al.,	FACTS IN SUPPORT OF
	FEDERAL DEFENDANTS'
Defendants.)	CROSS-MOTION FOR SUMMARY
	JUDGMENT AND IN
	OPPOSITION TO PLAINTIFFS'
GREATER YELLOWSTONE	MOTION FOR SUMMARY
COALITION,) JUDGMENT
Condition,	
Plaintiff,	
V.	
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VENICALAZAD et el	
KEN SALAZAR, et al.,)
Defendants)
Defendants)
)

PRELIMINARY STATEMENT

Federal Defendants' Motion for Summary Judgment does not call upon the Court to resolve issues of fact as to the merits of the claims. Rather, it asks the Court to review the United States Fish and Wildlife Service's ("FWS") decision to identify the Northern Rocky Mountain ("NRM") population of the gray wolf as a distinct population segment ("DPS") and to revise the list of endangered and threatened wildlife to remove wolves within the DPS boundaries, except in Wyoming, from the protections of the Endangered Species Act ("ESA"). See Final Rule, 74 Fed. Reg. 15123 (Apr. 2, 2009) ("NRM Rule"). The Court sits to decide the legal issue of whether or not the decision was arbitrary and capricious under the Administrative Procedure Act, 5 U.S.C. § 706(2). See Occidental Eng'g Co. v. INS, 753 F.2d 766, 769 (9th Cir. 1985). Thus, there are generally no facts to resolve. See Marshall County Health Care Auth. v. Shalala, 988 F.2d 1221, 1226 (D.C. Cir. 1993) (holding that in agency review context there was no real distinction between questions presented in Rule 12(b)(6) motion to dismiss and motion for summary judgment).

Although there are no facts to be resolved, Federal Defendants hereby submit this Statement of Undisputed Facts in support of their motion for summary judgment, pursuant to L.R. 56.1.

STATEMENT OF MATERIAL FACTS NOT IN DISPUTE

I. GRAY WOLF BIOLOGY

1. "Wolves are one of the most adaptable and resilient land mammals on earth and, except for excessive human persecution, wolf populations can survive every type of natural catastrophic event." 74 Fed. Reg. at 15151. Thus, wolves had the greatest natural distribution of any land mammal on earth, next to humans. AR09_36270 (Boitani 2003); AR09_38159 (Nowak 2003).

- 2. Gray wolves (*Canis lupus*) are habitat generalists, reproduce quickly and efficiently, and have evolved to form robust populations that can successfully breed and raise young even in the most extreme conditions. AR09_36377 (Brainerd, et al. 2008); AR09_37998 (Mech and Boitani 2003); AR09_37038 (Fuller, et al. 2003).
- 3 Gray wolves are social animals living in packs ranging from 2 to 12 wolves and averaging about 10 wolves in protected areas in the NRM region and substantially larger in some areas of Yellowstone National Park. 74 Fed. Reg. at 15123.
- 4. Breeding members of a pack (the top-ranking adult male and female) usually average five pups, only four of which typically survive until winter. 74 Fed. Reg. at 15123.
- 5. Pack structure is highly adaptable and resilient. 74 Fed. Reg. at 15123-24. Pups can be reared by another pack member should their parents die, and breeding members are quickly replaced. 74 Fed. Reg. at 15123-24; AR09_36377 (Brainerd et al. 2008).
- 6. Wolves also seek unrelated wolves as mates, regardless of the numbers, density, or presence of other wolves, ensuring that wolf populations maintain high levels of genetic diversity and health. 74 Fed. Reg. at 15177; AR09_38005-09, 38015 (Mech and Boitani 2003); AR09_1409; AR09_41426-28 (Wabakken, et al. 2007); AR09_37840-37846 (Linnell, et al. 2005); AR09_41375-41393 (vonHoldt, et al. 2007); AR09_37054-55 (Fuller, et al. 2003); AR09_38572 (Paquet, et al. 2006); AR09_36281 (Bensch, et al. 2006)).
- 7. Packs in the NRM region typically occupy an area of approximately 200 to 500 mi² and defend the area from other wolves or packs. 74 Fed. Reg. at 15138.

- 8. Wolves disperse to join other packs or attempt to form their own packs in unoccupied habitat. 74 Fed. Reg. at 15138; AR09_36316 ("[T]he ultimate function of dispersal, increased reproductive success, remains the same for dispersers everywhere."). The average distance of a dispersing wolf is 60 miles, but wolves can travel significantly longer distances. 74 Fed. Reg. at 15126-27.
- 9. Wolf dispersal normally peaks in late winter, prior to the start of the breeding season (February-March). *See* AR09_5503; AR09_5468; AR09_36305 (Boitani 2003) (indicating that January-February and May-June were peak months for dispersal); AR 09_37648 (Jimenez 2008d) ("Dispersal peaked in fall and early winter (October-January), with the highest dispersal [] in January").
- 10. "[E]xcept for excessive human persecution, wolf populations can survive every type of natural catastrophic event." 74 Fed. Reg. at 15151; AR09_57 (Isle Royale wolf population demonstrating resiliency of wolf populations); AR09_36298 (Boitani 2003).
- 11. Wolf populations also can rapidly recover from severe disruptions and can more than double in two years if mortality is reduced, and increases of nearly 100% per year have been documented in low-density habitat. 74 Fed. Reg. at 15124; AR09_37050-51 (Fuller et al. 2003); AR09_40937 (USFWS et al. 2009).

II. LISTING HISTORY AND RECOVERY PLANNING

- 12. FWS listed gray wolf subspecies *Canis lupus lycaon* and *Canis lupus irremotus* as endangered in 1973, 39 Fed. Reg. 1158 (Jan. 4, 1974), and added *Canis lupus baileyi* and *Canis lupus monstrabilis* to the list of endangered species in 1976, 41 Fed. Reg. 17736, 17740 (Apr. 28, 1976); 41 Fed. Reg. 24062, 24066 (June 14, 1976).
- 13. In March 1978, FWS published a rule re-listing the gray wolf at the species level (*Canis lupus*) to eliminate problems inherent in the prior practice of listing the gray wolf by subspecies. 43 Fed. Reg. 9607 (Mar. 9, 1978); AR09_18.

The 1978 rule listed the gray wolf as threatened in Minnesota and endangered throughout the remaining 47 conterminous United States and Mexico. *Id*.

- 14. In November 1994, as part of an effort to reintroduce gray wolves in central Idaho and Yellowstone National Park, FWS designated nonessential experimental populations of gray wolves in Wyoming and parts of Idaho and Montana pursuant to ESA § 10(j), 16 U.S.C. § 1539(j).
- 15. FWS promulgated special rules under ESA § 10(j) for the purpose of wolf reintroduction in central Idaho and the Greater Yellowstone Area. 50 C.F.R. § 17.84(i), The 10(j) rules, codified at 50 C.F.R. § 17.84(i), established two non-essential experimental populations and provided increased management flexibility to address potential human-wolf conflicts. *Id*.
- 16. FWS prepared recovery plans for the NRM gray wolf in 1980 and 1987. *See* AR09_39252-39329 (USFWS 1980); AR09_39330-39335 (USFWS 1987). From 1980 to the present, FWS consistently determined that the "key to wolf recovery was establishing a viable demographically and genetically diverse wolf population in core recovery areas of the NRM." 74 Fed. Reg. at 15132.
- 17. The 1980 recovery plan's objective was to re-establish and maintain viable populations of the NRM wolf. 74 Fed. Reg. at 15130; AR09_39256 (USFWS 1980).
- 18. FWS revised the recovery plan in 1987. AR09_39330-39335 (USFWS 1987). The 1987 recovery plan identified three areas as the most likely locations to support a recovered wolf population, the Northwestern Montana recovery area, the central Idaho recovery area, and the Greater Yellowstone Area recovery area. 74 Fed. Reg. at 15127; AR09_39333-34 (USFWS 1980).
- 19. The 1987 recovery plan further specified a recovery criterion of a minimum of ten breeding pairs, defined as two wolves of opposite sex and age

capable of producing young) for a minimum of three successive years in each of the three recovery areas. 74 Fed. Reg. at 15130; AR09_39334 (USFWS 1987).

- 20. Since 1987, FWS has repeatedly evaluated and, when necessary, modified the NRM recovery goals. 74 Fed. Reg. at 15130-35.
- 21. In 1994, FWS determined that the 1987 recovery goal was a minimum goal, AR09_41876, 42152, 42228 (USFWS 1994), and FWS revised the definition of "breeding pair" as an adult male and an adult female that have produced at least two pups that survived until December 31 of the year of their birth, *id.* at 42167.
- 22. In 1994, FWS also concluded that 30 or more breeding pair comprising over 300 wolves in a metapopulation (*i.e.*, a population that exists as a partially isolated sets of subpopulations) with the potential for genetic exchange between subpopulations should have a high possibility of long-term persistence and viability. 74 Fed. Reg. at 15130-31; AR09_42228 (USFWS 1994).
- 23. In 1994, later reaffirmed in 2002, FWS determined that "the required genetic exchange could occur by natural means or by human-assisted migration and that dispersal of wolves between recovery areas was evidence of that genetic exchange." 74 Fed. Reg. at 15131; AR09_42228 (USFWS 1994).
- 24. During the 2002 review, FWS and numerous wolf experts "overwhelmingly thought the recovery goal derived in [the] 1994 analysis" was biologically appropriate and "represented a viable and recovered wolf population." 74 Fed. Reg. at 15131; AR09_36162-64 (Bangs 2002).
- 25. In the NRM Rule, FWS reaffirmed that the NRM recovery goal is a wolf metapopulation (a population composed of partially isolated subpopulations) that never goes below ten breeding pairs (a pack with at least one adult male and one adult female and at least two pups on December 31) and at least 100 wolves each in Montana, Idaho, and Wyoming for at least three successive years. 74 Fed. Reg. at 15123.

- 26. The recovery goal requirement to maintain an NRM metapopulation provides a population that is more resilient to area-specific disruptions than a single population in just one contiguous area. 74 Fed. Reg. at 15132-33; AR09_036976 (Fritts and Carbyn 1995); SAR09_121 (Mills 2007, p. 212-14).
- 27. The metapopulation dynamic further recognizes that either or both human assisted or natural connectivity and genetic exchange between recovery units assures that genetic diversity is maintained above levels that would not threaten the NRM wolf population. 74 Fed. Reg. at 15131.
- 28. FWS's criteria also provide that the core recovery areas remain a source for dispersing wolves that can migrate between recovery areas, thereby providing for connectivity and genetic exchange. 74 Fed. Reg. at 15137, 15132.
- 29. The breeding pair requirement was developed to ensure biologically meaningful recovery criteria, as the foundation of any viable population is successful breeding and recruitment into the population. 74 Fed. Reg. at 15132; AR09_38093 (Mitchell et al. 2008). FWS measures wolf recovery by the number of breeding pairs as well as the number of wolves, as wolf populations are maintained by packs that successfully raise young. *Id.* Wolf populations are composed of packs that meet the breeding pair criteria, packs that are not confirmed to meet the breeding pair criteria, and lone wolves. *See id.*; AR09_37045 (Fuller et al. 2003).
- 30. FWS and numerous independent experts have consistently determined that the NRM wolf recovery goal represents the best and most current science regarding wolf population viability and scientifically describes a recovered wolf population. 74 Fed. Reg. at 15133; AR09_41876 (USFWS 1994); AR09_36971 (Fritts and Carbyn 1995); AR09_36155 (Bangs 2002).

- 31. In the NRM Rule, FWS further provided for a 50% buffer over its minimum recovery criteria by providing that the States must consistently maintain at least 15 breeding pairs and 150 wolves per State. *See* 74 Fed. Reg. at 15186.
- 32. A Memorandum of Understanding signed by Montana, Idaho, and FWS commits Idaho and Montana to continue to monitor wolf genetic diversity, enhance opportunities for natural connectivity between all recovery areas, and assure that adequate genetic exchange will occur, even if the highly unlikely theoretical situation arose where human-assisted genetic exchange became necessary. 74 Fed. Reg. at 15135; AR09_37222 (Groen et al. 2008).

III. NRM DPS POPULATION TRENDS

A. Monitoring of NRM Wolves

- 33. Since the mid-1990s, up to 30% of the overall NRM wolf population has been monitored with radio telemetry and current population estimates represent "a minimum and conservative measure of the number of wolf packs that actually meet the breeding pair metric." 74 Fed. Reg. at 15138; AR09_41208 (USFWS, et al. 2009).
- 34. The NRM wolf population estimate is an actual minimum count of wolves in known packs in Montana and Wyoming, *see* 40954-96 (USFWS et al. 2009) (Montana); *id.* at 40900-19 (Wyoming). In Idaho, wolves in packs (without radio-collared wolves) of four or more that are confirmed by verified sightings and tracks are also used to estimate total population size. AR09_41204 (USFWS et al. 2009). However, these estimates still likely underestimate the true number of wolves in Idaho. *Id.* at 41113-41118, 41124-25.
- 35. Except for a few known radio-collared individuals, the estimate in Montana, Idaho, and Wyoming typically does not incorporate wolves not associated with packs, which in most wolf populations comprise 10-15% of a wolf population. *Id.*; AR09_37038, 37045 (Fuller et al. 2003).

- 36. The breeding pair metric reported in FWS's annual interagency wolf report represents a conservative estimate of the minimum number of packs that have successfully raised at least two pups and have breeding adults going into February breeding season. AR09_40894 (USFWS et al. 2009).
- 37. For example, only 95 of 217 packs documented in 2008 were classified as a breeding pair because not enough was known about them to satisfy FWS's breeding pair criteria. AR09_40894 (USFWS et al. 2009). Nearly every year, FWS finds several wolf packs that it missed while making the previous year's surveys and population estimates. *See* AR09_40937 (USFWS et al. 2009) (Table 4a, Note).
- 38. FWS's monitoring strategy is intentionally conservative and creates a substantial safety net for wolf population health because FWS reports only on proven minimum numbers of wolves, largely in packs, and proven wolf breeding pairs. 74 Fed. Reg. at 15138; AR09_38094, 38098 (Mitchell et al. 2008); AR09_39334 (USFWS 1987); AR08_123367; AR08_12350.
- 39. FWS's NRM wolf population estimate represents a known minimum number of wolves and breeding pairs and guarantees that the actual NRM population is substantially above those minimum figures and thereby safely above minimum recovery levels. 74 Fed. Reg. at 15132, 15138; AR09_38094-95, 38102 (Mitchell et al. 2008).

B. The Status Of Wolves In The NRM DPS

- 40. Wolves naturally recolonized the northwestern Montana recovery area, which consists of 33,386 mi² and includes National Parks, wilderness areas, and adjacent public and private lands in northern Montana and the northern Idaho panhandle. 74 Fed. Reg. at 15136.
- 41. The first successful reproduction in northwestern Montana recovery area was documented in 1986. Ten years later, the wolf subpopulation grew to 70

wolves in 7 known breeding pairs. 74 Fed. Reg. at 15136. By the end of 2008, approximately 276 wolves in 18 breeding pairs existed in the northwestern Montana recovery area. *Id*.

- 42. By the end of 2009, the northwestern Montana recovery area will surpass the ten breeding pair and 100 wolves metric for the fourth consecutive year, and probably has done so for the last seven years. 74 Fed. Reg. at 15136.
- 43. Wolves were first introduced into the central Idaho recovery area in 1995. 74 Fed. Reg. at 15137. The central Idaho consists of 20,700 mi² and includes wilderness areas and adjacent public lands. *Id.* at 15136-37.
- 44. The central Idaho subpopulation grew to 914 wolves in 42 breeding pairs by the end of 2008. 74 Fed. Reg. at 15136. At the end of 2008, the central Idaho recovery area surpassed the ten breeding pair and 100 wolves metric for 11 consecutive years. *Id.* at 15137.
- 45. Wolves were reintroduced into the Greater Yellowstone Area recovery area, which contains 24,600 mi² and includes wilderness areas, Yellowstone National Park, Grand Teton National Park, and adjacent public and private lands. 74 Fed. Reg. at 15137.
- 46. In 1995 and 1996, 14 and 17 wolves from different family groups in Canada were introduced into Yellowstone National Park, and 10 pups were released into the Park in the spring of 1997. 74 Fed. Reg. at 15137.
- 47. At the end of 2008, the Greater Yellowstone Area recovery area surpassed the ten breeding pair and 100 wolves metric for nine consecutive years. 74 Fed. Reg. at 15137.
- 48. The NRM population increased an average of about 22% annually from 1995 to 2008, with increases ranging from 8 to 50%. 74 Fed. Reg. at 15135; AR09_40938 (USFWS et al. 2009). By the end of 2008, the NRM gray wolf population numbered approximately 1,645 wolves in nearly 200 packs, 95 of

which were classified as breeding pairs. AR09_40938 (USFWS et al. 2009). By the end of 2008, there were 497 wolves in Montana, 846 wolves in Idaho, and 302 wolves in Wyoming. *Id*.

- 49. Nearly all of the 65,725 mi² of suitable habitat in the NRM is occupied by wolf packs and, with current population numbers exceeding 1,600 wolves, the NRM DPS is likely at or above long-term carrying capacity. 74 Fed. Reg. at 15140; AR09_71.
- 50. Once suitable habitat becomes saturated with wolf packs, wolf numbers are regulated by the amount of prey, intra-species conflicts, other forms of mortality, and dispersal. 74 Fed. Reg. at 15123. FWS found that significant expansion of the NRM DPS into new areas, or maintenance of a NRM DPS above 1,500 wolves, is unlikely in the future. *Id.* at 15140.
- 51. In the NRM region, the numeric recovery goal was first achieved in 2000, and the temporal component of the recovery goal was reached in 2002. 74 Fed. Reg. at 15124. The recovery goal has been exceeded every year since 2002. *Id.*; AR09_40937-38 (USFWS et al. 2009).
- 52. The NRM DPS is also connected through routine dispersal and exchange to the over-12,000 wolf population in Canada. 74 Fed. Reg. at 15137. Thus, NRM DPS now constitutes a 400-mile southern extension of the vast and healthy Canadian wolf population. 74 Fed. Reg. at 15140.

IV. LISTING OBLIGATIONS UNDER THE ENDANGERED SPECIES ACT

53. The ESA delegates authority to list most terrestrial species to the Secretary of Interior. 16 U.S.C. §§ 1532(15), 1533. The Secretary, in turn,

A "breeding pair" is the metric FWS, Idaho, and Montana use to describe successfully reproducing wolf packs and is defined as packs that have at least an adult male and an adult female that raised at least two pups until December 31. 74 Fed. Reg. at 15132.

administers his responsibilities through the U.S. Fish and Wildlife Service. *See* 50 C.F.R. § 402.01(b).

- 54. The ESA directs the Secretary to publish lists of endangered and threatened species in the Federal Register and to "specify with respect to each such species over what portion of its range it is endangered or threatened." 16 U.S.C. § 1533(c)(1).
- 55. The ESA defines "species" as including "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." *Id.* § 1532(16).
- 56. A species is endangered if it is "in danger of extinction throughout all or a significant portion of its range." *Id.* § 1532(6). A species is threatened if it is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." *Id.* § 1532(20).
- 57. FWS bases its listing decisions on five statutorily prescribed factors, any one of which may support a listing determination:
 - (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
 - (B) overutilization for commercial, recreational, scientific, or educational purposes;
 - (C) disease or predation;
 - (D) the inadequacy of existing regulatory mechanisms; or
 - (E) other natural or manmade factors affecting its continued existence.

Id. § 1533(a)(1).

58. FWS must base its listing determinations "solely on the basis of the best scientific and commercial data available," after conducting a status review of the species and taking into account efforts by any state or foreign nation to protect the species. *Id.* § 1533(b)(1)(A).

- 59. Once a species is listed, various ESA provisions apply, such as the prohibition on the unauthorized "take" of the species or the requirement that federal agencies ensure that their actions are not likely to jeopardize the species or destroy or adversely modify critical habitat. 16 U.S.C. §§ 1536, 1538.
- 60. FWS defines "recovery" to mean "improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in [ESA] section 4(a)(1)." 50 C.F.R. § 402.02; 16 U.S.C. § 1532(3).
- 61. The ESA instructs the Secretary to develop and implement recovery plans for the conservation and survival of listed species, with limited exceptions. 16 U.S.C. § 1533(f)(1).
- 62. The ESA further instructs FWS to monitor the status of listed species and "from time to time revise each list . . . to reflect recent determinations, designations, and revisions made in accordance with" the listing provisions of ESA § 4. 16 U.S.C. § 1533(c)(1).
- 63. The same five factors that determine whether a species is endangered or threatened also determine whether threats to a species have been diminished or removed to the point that reclassification or delisting is appropriate. *See id.* § 1533(c)(2); *see also* 50 C.F.R. § 424.11(d).

V. FWS'S 2009 NORTHERN ROCKY MOUNTAIN DISTINCT POPULATION SEGMENT FINAL RULE

- 64. The NRM gray wolves have exceeded the numerical, distributional, and temporal recovery goal every year since 2002. 74 Fed. Reg. at 15124. FWS has taken several regulatory actions to remove the gray wolves from the ESA's list of threatened and endangered species. *Id*.
- 65. On February 27, 2008, FWS issued a final rule recognizing the NRM DPS and removing the DPS from the ESA's list of threatened and endangered species. 73 Fed. Reg. 10514 (Feb. 27, 2008).

- 66. A lawsuit was filed challenging FWS's rule, and on July 18, 2008, the final rule was enjoined. *Defenders of Wildlife v. Hall*, 565 F. Supp. 2d 1160 (D. Mont. 2008). On October 14, 2009, the NRM rule was vacated and remanded to FWS. *See* Order, Doc. 112, *Defenders of Wildlife v. Hall*, cv 08-56-M-DWM (Oct. 14, 2008).
- 67. Following vacatur and remand, FWS reopened the comment period on the proposed rule and sought information, data, and comments on the 2007 proposed rule (72 Fed. Reg. 6106 (Feb. 8, 2007)), the issues raised by the courts in *Defenders of Wildlife v. Hall* and *Humane Soc'y v. Kempthorne*, 579 F. Supp. 2d 7 (D.D.C. 2008), the adequacy of Wyoming's regulatory mechanisms, the portions of Wyoming that constituted a significant portion of the NRM DPS's range, and other issues. 73 Fed. Reg. 63926 (Oct. 28, 2008).
- 68. In total, FWS's proposed rule was subject to 150 days of public comment and eight public hearings and open houses, and FWS received over 520,000 comments from the general public, environmental organizations, sportsman and outfitter groups, agricultural agencies and organizations, and Tribal, Federal, State, and local governments. 74 Fed. Reg. at 15138.
- 69. On January 14, 2009, the Secretary of the Department of the Interior and FWS announced the decision to identify the NRM DPS and remove the DPS from the protections of the ESA, except in Wyoming. AR09_1737. The rule was subsequently withdrawn from the Federal Register to provide the Obama Administration an opportunity to review and evaluate the NRM Rule. *See* AR09_1669-71.
- 70. Secretary of the Interior Ken Salazar affirmed the NRM Rule on March 6, 2009. AR09_28978-80.
- 71. Secretary Salazar explained "that the Service's biologists were in agreement that this delisting was the right thing to do at the right time because

biological recovery has been achieved" and that he "will be closely monitoring the management of the gray wolf in those states where it was delisted. If we believe that the management plans are not resulting in the preservation of the species, then we will review whether it is necessary to relist the gray wolf." AR09-262.

- 72. On April 2, 2009, the NRM Rule was published in the Federal Register, with an effective date of May 4, 2009. 74 Fed. Reg. 15123.
- 73. In the NRM Rule, FWS identified a distinct population segment, a "species" as defined under the ESA, *See* 16 U.S.C. § 1532(16) (defining "species"); 74 Fed. Reg. at 15125-29 (identifying the NRM DPS).
- 74. Pursuant to ESA §§ 4(a)(1), 4(c)(1), FWS reviewed the status of the entire DPS. *See* 16 U.S.C. §§ 1533(a)(1), (c)(1); 74 Fed. Reg. at 15156-15184.
- 75. In the course of its review, FWS determined that Wyoming constitutes a significant portion of the DPS's range and that wolves in Wyoming remain an "endangered species" under the Act. 74 Fed. Reg. at 15181-83; 16 U.S.C. §§ 1532(6), (20) (definitions of "endangered species" and "threatened species").
- 76. FWS also determined that the wolves in the DPS outside of Wyoming do not constitute a threatened species or an endangered species. *See* 74 Fed. Reg. at 15179-80, 15184.
- 77. Pursuant to § 4(c)(1), FWS identified the NRM DPS as the listed species, and FWS thereafter specified that the NRM DPS is endangered in Wyoming, a significant portion of the DPS's range. 74 Fed. Reg. at 15186-88; 50 C.F.R. § 17.11(h); 16 U.S.C. § 1533(c)(1).
- 78. Under FWS's rule, wolves within the NRM DPS boundaries, except in Wyoming, are now managed by the States, and wolves in Wyoming will continue to be protected under the ESA and regulated as a non-essential, experimental population pursuant to 50 C.F.R. § 17.84(i), (n). 74 Fed. Reg. at 15123.

A. Identification of A Significant Portion of the DPS's Range

- 79. FWS interpreted the ESA's term "endangered species," and in particular the definitional phrase "throughout all or a significant portion of its range," in the NRM Rule. 74 Fed. Reg. at 15152-53; AR09_39216-39234 (USDOI 2007).
- 80. FWS interpreted the ESA as providing that: (1) where a status review reveals that a species is in danger of extinction throughout all of its range, the species is listed and protections are applied to the entire species; or (2) where a status review reveals that a species is in danger of extinction only throughout a significant portion of its range, the species is listed and protections applied only to the species located in the significant portion of its range. 74 Fed. Reg. at 15152-53; AR09_39216-39234.
- 81. Under FWS's interpretation, "the first step in the analysis is to determine whether the species is in danger of extinction throughout all of its range." 74 Fed. Reg. at 15179.
- 82. If the species does not meet the definition of an endangered species in all of its range, FWS next considers whether there are any significant portions of the species' range where the species is in danger of extinction. 74 Fed. Reg. at 15180.
- 83. "A portion of a species' range is significant if it is part of the current range of the species and is important to the conservation of the species because it contributes meaningfully to the representation, resiliency, or redundancy of the species. The contribution must be at a level such that its loss would result in a decrease in the ability to conserve the species." 74 Fed. Reg. at 15180 (explaining that the terms "resiliency," "redundancy," and "representation" are indicators of the conservation value of portions of the range and explaining how FWS analyzes these factors).

- 84. If FWS identifies a significant portion of a species' range, FWS determines "whether in fact the species is threatened or endangered in any significant portion of its range." 74 Fed. Reg. at 15180-82.
- 85. If a species is endangered in only a significant portion of its range, then the species within the significant portion is protected as an endangered species under the ESA. 74 Fed. Reg. at 15152-53; AR09_35662-35696; *id.* at 35666 ("an [significant portion of its range] is not a 'species,' i.e. it is not a listable entity as defined in the Act, but is the portion of a range of a listable entity where we may determine that listable entity is threatened or endangered").
- 86. As applied in the NRM Rule, FWS identified the NRM DPS and considered the status of and threats to wolves in both occupied and unoccupied portions of the DPS's range. 74 Fed. Reg. at 15125-29, 15156-79.
- 87. Analyzing and applying the five statutory factors in ESA § 4(a)(1), FWS concluded that the DPS was not threatened or endangered throughout "all" of its range. 74 Fed. Reg. at 15181.
- 88. FWS also found that Wyoming constituted a significant portion of the DPS's range and that, due to inadequate regulatory mechanisms, wolves remained endangered in Wyoming. 74 Fed. Reg. at 15182-83.
- 89. Pursuant to ESA § 4(c)(1), FWS revised the ESA's list to reflect its identification of an NRM DPS and its finding that wolves in Wyoming continue to be subject to the protections of the ESA. 74 Fed. Reg. at 15184; 50 C.F.R. § 17.11(h) (identifying the listed species as the NRM DPS with the ESA's protections applied to wolves in Wyoming).
- 90. FWS did not "list" or "delist" wolves in Wyoming; rather, the NRM DPS constitutes the listed species, and Wyoming is the portion of the range in which the wolves are protected as an endangered species. 50 C.F.R. § 17.11(h).

B. DPS Identification And Boundaries

- 91. The NRM DPS contains all known resident wolf packs in the NRM and a surrounding 190-mile buffer area, the most likely area routinely visited by dispersing wolves from the NRM population. *See* 74 Fed. Reg. 15126, Figure 1; *id.* at 15126-27 (considering the current and past distribution of known wolf packs from 2002-2008, the dispersal distances of wolves, and suitable and unsuitable habitat in defining the boundaries of the NRM DPS).
- 92. The DPS boundaries include all of Montana, Idaho, and Wyoming, the eastern third of Washington and Oregon, and a small portion of north-central Utah. 74 Fed. Reg. at 15125.
- 93. The DPS boundary approximates the historic range of the NRM subspecies originally listed in 1974 and is inclusive of areas focused on by the 1980 and 1987 recovery plans and the entire central Idaho and Greater Yellowstone Area experimental population areas. 74 Fed. Reg. at 15125, 15143.
- 94. The NRM DPS encompasses a 110,000 mi² area containing three areas of large core refugia (National Parks, wilderness areas, and large blocks of remote secure public land) and at least 65,725 mi² of suitable wolf habitat. *Id.* at 15133.
- 95. The NRM has amongst the highest diversity of large predators and native ungulate prey species, and large blocks of suitable habitat exist in central Idaho, the Greater Yellowstone Area and, to a lesser extent, in northwestern Montana. *Id.* at 15129.
- 96. The area encompassing all persistent pack territories in the NRM states has remained at approximately 110,000 mi² since 2002, and all population growth has been in vacant suitable habitat within that area. 74 Fed. Reg. at 15137.
- 97. Today, resident wolf packs occupy nearly all suitable habitat in Montana, Idaho, and Wyoming. 74 Fed. Reg. at 15158; AR09_38170.

98. A comparison of theoretical suitable wolf habitat, AR09_38165 (Oakleaf et al. 2006), and current wolf distribution indicates the suitable NRM is nearly saturated with resident wolf packs. *See* AR09_41095, 41209 (USFWS et al. 2009); AR09_36246 (Bangs et al. In Press); AR09_38942 (Smith et al. 2008).

C State Management Of Wolf Populations

1. State Management Objectives

- 99. Federal and state governments have numerous laws, regulations, management plans, cooperative agreements, and memorandums of understanding that maintain recovery of the NRM wolves. *See* AR09_37855-37972 (McDonald 2008); AR09_38292-38551 (Otter 2008); 50 C.F.R. §§ 17.84(i), (n).
- 100. Montana and Idaho have managed wolves in their States since 2004 and 2005, respectively, under cooperative agreements with FWS and have expertise, field staff, contacts, and organizations to professionally and responsibly manage wolves. 74 Fed. Reg. at 15167, 15168. The States' management efforts have proven to be successful. *See id.* at 15167; AR09_40938 (USFWS et al. 2009) (Table 4b).
- 101. In Montana, the gray wolves are managed by the Montana Department of Fish, Wildlife and Parks and the Montana Fish, Wildlife and Parks Commission, and the gray wolf is classified as a "species in need of management," Mont. Code § 87-5-131; *id.* § 87-5-102(5). Montana is statutorily required to manage gray wolves to prevent listing under the ESA and to "assure that recovery criteria are met or exceeded." Mont. Admin. R. 12.9.1301; Mont. Code § 87-1-201 (9)(a).
- 102. In Idaho, the Idaho Department of Fish and Game and the Idaho Department of Fish and Game Commission are the State's primary wolf managers responsible for developing population management and monitoring programs and

approving big game rules that outline specific quotas, seasons, and methods of take for wolf harvest. AR09_38299 (Otter 2008).

- 103. The Idaho Department of Fish and Game Commission has authority to classify wildlife under Idaho Code §§ 36-104(b) and 36-201, and gray wolves are classified as a big game animal under Idaho Admin. Code 13.01.06 and 13.01.08. 74 Fed. Reg. at 15168. Idaho is required to manage wolves "to ensure that wolves will not become re-listed under the" ESA. AR09_27222 (2002 Idaho Wolf Plan); Idaho Code § 36-103.
- 104. Through State laws, administrative rules, and management plans, Montana and Idaho have committed to manage for over 15 breeding pairs and 150 wolves in mid-winter, to ensure that the State's portion of the NRM population never drops below the minimum recovery goal of ten breeding pairs and 100 wolves. *See* AR09_37859 (McDonald 2008); AR09_38299-38301, 38317 (Otter 2008), AR09_33105.
- 105. Each State's regulatory framework conservatively provide that gray wolves will be managed for over 15 breeding pairs and 150 wolves in the States, and data since 1986 indicate that a breeding pair corresponds to 14 wolves in midwinter. 74 Fed. Reg. at 15132; AR09_40937-38 (USFWS et al. 2009)
- 106. Measuring recovery goals in mid-winter, when the population is near its annual low point, results in average annual wolf populations much higher than the minimum goals. 74 Fed. Reg. at 15132.
- 107. Counting only those packs that are confirmed to meet the breeding pair metric understates the actual number of packs and wolves in Montana and Idaho. 74 Fed. Reg. at 15132; AR09_37859 (McDonald 2008) (only roughly 43% of packs in Montana qualify as a breeding pair in an average year); AR09_41103 (of the 88 resident wolf packs in Idaho, only 39 qualified as breeding pairs, or roughly 44% of wolf packs).

- 108. The target management levels in Idaho and Montana are well above the conservative 15 breeding pair and 150 wolves metric. *See* 74 Fed. Reg. at 15137; AR_37863 (McDonald 2008); AR09_38317 (Otter 2008). FWS and the National Park Service will continue to manage for approximately 300 wolves in Wyoming. *See* 74 Fed. Reg. at 15137.
- 109. Montana and Idaho have committed to maintain natural metapopulation structure of the NRM wolf population by encouraging natural dispersal and effective migrants, for instance by managing wolf populations at higher rather than minimum levels, promoting greater pack distribution through suitable habitat, and maintaining the integrity of core recovery areas and refugia. 74 Fed. Reg. at 15135; AR09_38301 (Otter 2008); AR09_35105.
- 110. Overall, wolf management in Idaho and Montana would include population monitoring, routine analysis of population health, management in concert with prey populations, law enforcement, control of domestic animal and human conflicts, implementation of a wolf-damage mitigation and reimbursement program, research, and information and public outreach. *See* AR09_37855-37972 (McDonald 2008); AR09_38292-38551 (Otter 2008).

2. Wolf Control Measures

- 111. In Montana, individuals may kill a wolf without a permit if the wolf "is attacking, killing, or threatening to kill a person or livestock" or if the wolf "is in the act of attacking or killing a domestic dog." Mont. Code § 87-3-130(1).
- 112. The administrative rules define "threatening to kill" as "the actual chasing, testing, molesting, harassing of livestock or livestock herding/guarding animals that would indicate to a reasonable person that an attack was imminent." AR09_37977 (McDonald 2008).
- 113. The definition of "threatening to kill" includes chasing, testing, molesting, and harassing because this language describes the behavior wolves

exhibit as they initiate hunting with the intent to kill their prey. AR09_37868 (McDonald 2008).

- 114. The wolf has to be witnessed killing or threatening to kill livestock, physical evidence is required, and the incident has to be reported to allow authorities to investigate. *See* AR09_37868 (McDonald 2008); Mont. Admin. Code 12.9.1301 12.9.1305.
- 115. In Idaho, individuals may kill wolves that "are molesting or attacking livestock or domestic animals," where "molesting" is defined as "actions of a wolf that are annoying, disturbing or persecuting, especially with hostile intent or injurious effect, or chasing, driving, flushing, worrying, following after or on the trail of, or stalking or lying in wait for, livestock or domestic animals." Idaho Code § 35-1107(c).
- 116. The definition of "molesting" describes the behaviors of gray wolves that are typically observed immediately prior to attack. AR09_35128. Any lethal take must be reported within 72 hours. *Id.* The Idaho Department of Fish and Game has stated that it investigates every control action and reports the results to local prosecutors. AR09_35129.
- 117. The States' defense-of-property laws are similar in scope to federal experimental population regulations that were in effect in Idaho and Montana when the wolves were listed under the ESA. *See* 70 Fed. Reg. 1286, 1307 (Jan. 6, 2005) (authorizing private control actions when wolves are observed "in the act of attacking livestock or dogs"); *id.* at 1306 (defining "act of attacking" to include "chasing, molesting, or harassing by wolves that would indicate to a reasonable person that such biting, wounding, grasping, or killing of livestock or dogs is likely to occur at any moment").
- 118. FWS determined that a significant increase in the rate of wolf removal by private citizens defending private property is unlikely. *See* 74 Fed. Reg. at

15150 ("Following the initial delisting of gray wolves, private control actions did not increase dramatically. From delisting through July 18, 2008, eleven wolves were killed under Idaho's law. In 2006 and 2007, seven wolves were killed each year under the Act's 10(j) rule. The increase in wolves killed in 2008 by livestock and pet owners is consistent with an increase in wolves and concomitant depredations in Idaho that year."); *id.* ("In Montana, only four wolves were taken by private citizens while wolves were delisted between March 28 and July 18, 2008, but all could have been taken under the Act's 10j regulations if the species had been listed.").

- 119. FWS does not "expect private citizen take under State defense of property laws to significantly increase the overall rate of wolf removal." 74 Fed. Reg. at 15165.
- 120. Administrative Rules of Montana 12.9.1301 through 12.9.1305 guide the Montana Department of Fish, Wildlife and Parks' approach to addressing wolf-livestock conflicts, including the use of non-lethal and lethal control measures. *See* AR09_37963-69 (McDonald 2008).
- 121. Agency control of problem wolves is incremental and in response to confirmed depredations, and State management of conflicts would become more conservative and no public hunting would be allowed if there were fewer than 15 breeding pairs statewide. AR09_37967-69 (McDonald 2008).
- 122. In Idaho, agency control actions are governed by largely the same criteria employed by FWS while the wolves were listed. AR09_35109; AR09_38452-69 (Otter 2008). USDA's Wildlife Services must confirm that depredation was caused by wolves before any control actions are authorized, non-lethal controls are employed if available and are emphasized in dispersal corridors, and lethal controls are conducted incrementally first limited to a single wolf or

pair and additional wolves incrementally removed if necessary. AR09_35127-28; AR09_38461-62 (Otter 2008).

- 123. Radio telemetry data from 1984-2004 indicated about 26% of the radio-collared wolves (that includes adults, yearlings, and pups over six months of age) died annually. AR09_38942 (Smith et al. 2008). The data further indicate that overall mortality rates of radio-collared wolves since 2004 have not significantly changed. *Id*.
- 124. From 1984-2004, illegal killing and agency control of problem wolves each removed about 10% of the wolf population annually (14% agency removal occurred in 2008), another 3% were killed accidentally by vehicle collisions and other human causes, and about 3% died annually from natural causes. 74 Fed. Reg. at 15138.
- 125. With an annual average 26% mortality rate, the NRM wolf population increased at an average rate of 22% per year from 1996-2008. 74 Fed. Reg. at 15165.
- 126. In Wyoming, management of conflicts between wolves and livestock will continue to be addressed by FWS under the 1994 experimental population regulations. 74 Fed. Reg. at 15184.

3. Adaptive Management And Regulated Harvest

- 127. Both Idaho and Montana will manage the gray wolves under an adaptive management framework, allowing for increasingly permissive management of the gray wolves as the population increases and more restrictive management should the population decrease. *See* AR09_37859, 37884-85, 37934 (McDonald 2008); AR09_38229, 38317, 38336 (Otter 2008).
- 128. If wolf populations exceed 15 breeding pairs in Montana and 20 breeding pairs in Idaho, the State fish and wildlife agencies may propose and authorize regulated fair-chase public hunting seasons to assist in the management

of wolf numbers and pack distribution, to reduce damage to private property, and to balance wolf predation to native prey abundance. *See* AR09_37859, 37963 (McDonald 2008); AR09_38327 (Otter 2008); AR09_35107.

- 129. Regulated public hunting is a valuable and cost-effective wildlife management tool to conserve healthy wildlife populations, fund wildlife conservation, maintain and improve local human tolerance of wolves, and manage the numbers and distribution of wildlife populations to reduce conflicts with people. 74 Fed. Reg. at 15162; AR09_36173 (Bangs 2008).
- 130. The number of wolves that may be hunted in Idaho and Montana is regulated, and the States have flexibility to tailor hunting seasons to meet management objectives for the NRM gray wolves and other wildlife species. 74 Fed. Reg. at 15167-70; AR09_37998 (Mech and Boitani 2003); AR09_36305 (Boitani 2003); AR 09_37648 (Jimenez 2008d); *see also* AR09_32164; AR09_32190; AR09_32212; AR09_32256.
- 131. FWS concluded that these regulated public hunting programs constitute an important tool for the successful management and conservation of the gray wolf. 74 Fed. Reg. at 15162.

D. Threats Analysis

1. NRM Wolf Habitat And Range

- 132. FWS reviewed the quality, quantity, and distribution of habitat relative to the biological requirements of the NRM wolves. 74 Fed. Reg. at 15157; AR09_38165 (Oakleaf et al. 2006); AR09_36541 (Carroll et al. 2003); AR09_36554 (Carroll et al. 2006).
- 133. Modeling predicted that most suitable wolf habitat in the NRM region was located in the northwestern Montana, central Idaho, and in the Greater Yellowstone Area, the areas presently occupied by the NRM wolves. 74 Fed. Reg. at 15158. A comparison of actual wolf pack distribution and modeling predictions

of suitable habitat "indicates that nearly all suitable habitat in Montana, Idaho, and Wyoming is currently occupied and areas predicted to be unsuitable remain largely unoccupied." *Id*.

- 134. The wolf populations in the core recovery areas contain core refugia like Yellowstone National Park and the central Idaho wilderness that provide a steady source of dispersing wolves and "will continue to provide a constant source of dispersing wolves into surrounding areas, supplementing wolf packs and breeding pairs in adjacent, but less secure suitable habitat." 74 Fed. Reg. at 15158.
- 135. Modeling indicated that the three recovery areas had habitat suitable for dispersal between them that would remain relatively intact in the future. 74 Fed. Reg. at 15158; AR09_36555 (Carroll et al. 2006).
- 136. Occupied wolf habitat was defined as the area confirmed as being used by resident wolves and "all intervening areas including suitable or unsuitable habitat." 74 Fed. Reg. at 15159. FWS therefore included areas between the core recovery segments as occupied wolf habitat because they are important for demographic and genetic connectivity. *Id*.
- area used by persistent wolf packs has not significantly expanded since the population achieved its recovery goal. 74 Fed. Reg. at 15159. The NRM population's "stagnant outer distribution patterns for the past 6 years indicate there is probably limited suitable habitat for the NRM wolf population to expand significantly beyond its current outer boundaries." *Id*.
- 138. Seventy-one percent of the occupied NRM habitat is in public ownership, managed in a manner complementary with suitable wolf habitat and the maintenance of a viable wolf population. 74 Fed. Reg. at 15159-60; AR09_36547 (Carroll et al 2003); AR09_38171 (Oakleaf et al. 2005).

- 139. Further, all three recovery areas are sufficiently connected to allow for dispersal and exchange between the recovery areas. 74 Fed. Reg. at 15161; *See* AR09_41095 (USFWS et al. 2009) (map of NRM packs).
- 140. Canada, northwestern Montana, and central Idaho are connected by routine movement of wolves across nearly contiguous available suitable habitat. *Id.*; AR09_38170 (Oakleaf et al. 2006); AR09_36561 (Carroll et al. 2006); AR09_38676 (Pletscher et al. 1991); AR09_36306-07 (Boyd and Pletscher 1999).
- 141. While the Greater Yellowstone Area is the most isolated recovery area, radiotelemtry data demonstrate that the recovery area is not isolated; at least one wolf has naturally dispersed into the recovery area each year and at least four radio-collared wolves have immigrated into, bred, and produced offspring in the Greater Yellowstone Area between 1996 and 2008. *See* 74 Fed. Reg. at 15161.
- 142. Model predications through 2025 and 2040, "in combination with our understanding of wolf dispersal capabilities, demonstrate the quantity, quality, and distribution of habitat, including consideration of intervening development, will remain more than sufficient to allow adequate levels of natural connectivity into the foreseeable future." 74 Fed. Reg. at 15161.
- 143. Thus, occupied suitable habitat is secured by core recovery areas in the northwestern Montana, central Idaho, and Greater Yellowstone Area regions, and secure portions of the NRM DPS will be able to support large wolf populations well into the foreseeable future. 74 Fed. Reg. at 15161.
- 144. Further, unsuitable habitat and small fragmented areas of suitable habitat outside of the core recovery areas largely represent geographic locations where wolf breeding pairs would persist only in low numbers, if at all. 74 Fed. Reg. at 15161. This habitat is important to facilitating dispersal between recovery areas, and data indicate that threats to the NRM wolf's habitat are unlikely to disrupt such connectivity into the foreseeable future. *Id.* at 16162.

145. As FWS concluded: "Although such areas may historically have contained suitable habitat, wolf pack persistence in these areas are not important or necessary for maintaining a viable, self sustaining, and evolving representative wolf population in the NRM into the foreseeable future." 74 Fed. Reg. at 15161-62.

2. Human-Caused Mortality

- 146. FWS determined that human-caused mortality is the most significant issue pertaining to the health of the NRM DPS. 74 Fed. Reg. at 15179.
- 147. Wolf populations can maintain themselves despite sustained human caused mortality rates of between 30 and 50% per year. 74 Fed. Reg. at 15162; AR09_37051-52 (Fuller et al. 2003). Further, human-caused mortality can replace up to 70% of natural mortality when wolf populations are below carrying capacity. 74 Fed. Reg. at 16172; AR09_37053 (Fuller et al. 2003). Wolf pups can be raised by other pack members and breeding members quickly replaced. AR09_36377 (Brainerd et al. 2008)
- 148. "[W]olf populations are quite resilient to human-caused mortality if it is adequately regulated." 74 Fed. Reg. at 15162. In the NRM region, "[a]s long as populations are maintained well above minimum recovery levels, wolf biology (namely the species' reproductive capacity) and the availability of large, secure blocks of suitable habitat will maintain strong source populations capable of withstanding all other foreseeable threats." *Id.* at 15180.
- 149. Idaho and Montana have wolf management laws, plans and regulations that adequately regulate human-caused mortality, 74 Fed. Reg. at 15166-67, and the States of Montana and Idaho have committed to regulate human-caused mortality so that it does not reduce the NRM wolf population below recovery levels, *id.* at 15166. *See* AR09_37855 (McDonald 2008); AR09_38292 (Otter 2008).

- 150. The wolves in Idaho and Montana are managed as game animals, and violation of state laws will be subject to prosecution, 74 Fed. Reg. at 15179-80, and Idaho and Montana have committed to carefully manage all sources of mortality, *id.* at 15174.
- 151. The States have committed to manage wolves well above the minimum recovery goal, and "State projections indicate that the NRM wolf population in Montana and Idaho will likely be managed for around 673 to 1,002 wolves in 52 to 79 breeding pairs." 74 Fed. Reg. at 15174, 15179.
- 152. Connectivity among all recovery areas and federal management in Wyoming will provide for the long-term security of the DPS, and the NRM DPS's connectivity and genetic exchange with the vast Canadian population provides additional assurances for the long-term conservation of the DPS. 74 Fed. Reg. at 15180; AR09_37222-37225 (Groen et al. 2008).
- 153. Wolf mortality from agency control of problem wolves and legal take by private individuals under defense of property laws is expected to occur at levels comparable to those that existed while the wolves were protected under the ESA and, as such, compatible with species' recovery. 74 Fed. Reg. at 15165.
- 154. "A lack of substantial threats to the NRM gray wolf population, except in Wyoming, indicates that this DPS is neither in danger of extinction, nor likely to become endangered within the foreseeable future in any of its range, except in Wyoming." 74 Fed. Reg. at 15180.

3. Genetic Diversity And Connectivity

155. "[C]onnectivity issues are among the least likely to affect wolves when compared to nearly any other species of land mammal." 74 Fed. Reg. at 15152; AR09_38572 (Paquet et al. 2006). Genetic diversity in the NRM DPS subpopulations is currently "very high." 74 Fed. Reg. at 15142.

- 156. The NRM DPS is as genetically diverse as vast and expansive Canadian populations, 74 Fed. Reg. at 15131-32, 15175; AR09_36648-36653 (Forbes and Boyd 1996); AR09_36659 (Forbes and Boyd 1997); AR09_41393 (vonHoldt et al. 2007); AR09_41398-41404 (vonHoldt et al. 2008).
- 157. The existence of several healthy populations (in terms of survival and pup production) located in secure habitats provide a source of dispersing wolves that will maintain high levels of genetic fitness. 74 Fed. Reg. at 15131-32, 15175,
- 158. The biological ability of dispersing wolves to travel long distance and across virtually any habitat to find unrelated mates, regardless of the numbers, density, or presence of other wolves, also facilitates genetic diversity of the NRM subpopulations. 74 Fed. Reg. at 15134, 15152, 15175, 15177; AR09_38005-09 (Mech and Boitani 2003); AR09_37840-37846 (Linnell et al. 2001); AR09_37054-55 (Fuller et al. 2003); AR09_38572 (Paquet et al. 2006).
- 159. Routine dispersal has been documented between northwestern Montana, central Idaho, and adjacent Canada, and several transborder packs exist between Canada, northwestern Montana, and central Idaho. 74 Fed. Reg. at 15131-32, 15136, 15138, 15161, 15175; AR09_38676 (Pletscher et al. 1991); AR09_36325 (Boyd et al. 1995); AR09_36327, 36328; AR09_41391 (vonHoldt et al. 2007); AR09_36979 (Fritts and Carbyn 1995).
- 160. Wolves have dispersed into the Greater Yellowstone Area from central Idaho and northwestern Montana, some of which having successfully bred. 74 Fed. Reg. at 15134, 15175; AR2009_1672; AR09_41398-41402 (vonHoldt et al. 2008). Radio telemetry data (1995-2008) and genetic analysis (1995-2004) indicates that there is at least one naturally dispersing wolf entering the Greater Yellowstone Area per year and a little more than one effective migrant per generation (a new wolf breeds every four years). 74 Fed. Reg. at 15138; AR09_41402 (VonHoldt et al. 2008); AR09_37648 (Jimenez et al. 2008d).

- 161. Current levels of connectivity "ensure exchange of sufficient numbers of dispersing wolves to maintain demographic and genetic diversity. 74 Fed. Reg. at 15161; *id.* at 15133, 15128, 15134, 15142, 15176 (the over one effective migrant per generation in the Greater Yellowstone Area exceeds the widely accepted effective migrant per generation rule (citing AR09_38062-38072 (Mills 2008)); AR09_38060 (Mills 2007).
- 162. The NRM DPS does not contain the characteristics of wolf populations that exhibit low genetic diversity and inbreeding problems, such as populations (1) that are founded on few members, (2) that maintain low population numbers for long periods of time, (3) that are isolated, (4) that occupy fragmented habitats, (5) and that do not receive corrective management actions. 74 Fed. Reg. at 15142; AR09_49; AR09_57; AR09_36976-36978 (Fritts and Carbyn 1995); AR09_36299-36301 (Boitani 2003); AR09_37768 (Liberg 2005); AR09_37054-55 (Fuller et al. 2003).
- 163. At current levels, FWS concluded that no current actions are needed to further facilitate genetic diversity in any of the three NRM subpopulations. *See* AR09_4551 (declining Idaho's invitation to relocate wolves from central Idaho to Yellowstone National Park because there was no biological need to do so).
- 164. Rather, the proximity of the three recovery areas, in connection with the natural dispersal and biological behavior of wolves, represents a classic metapopulation structure and demonstrates no genetic or demographic problems in any recovery segment, including the Greater Yellowstone Area now or in the foreseeable future. 74 Fed. Reg. at 15135; AR09_36980 (Fritts and Carbyn 1995).
- 165. Due to currently high levels of genetic diversity, even if no genes entered the Yellowstone National Park and the Greater Yellowstone Area in the next 100 years, the wolf population's currently high genetic diversity likely would

- be slightly reduced, but not enough to threaten the population. 74 Fed. Reg. at 15177; *see also* AR09_41401 (vonHoldt et al. 2008); AR09_36299 (Boitani 2003).
- 166. At intended management levels of over 1,000 wolves in the NRM, natural dispersal alone is sufficient ensure long-term genetic health of species. 74 Fed. Reg. at 15134; *see also* AR09_36980 (Fritts and Carbyn 1995); AR09_36316 (Boyd et al. 1995); AR09_37648-37669 (Jimenez et al. 2008d).
- 167. Montana's and Idaho's regulatory frameworks provide additional assurances that the NRM's genetic health will be maintained. *See* 74 Fed. Reg. at 15135, 15176; *see* AR09_37872, 37959-64 (McDonald 2008); AR09_5503; AR09_38320-33 (Otter 2008).
- 168. Even if the NRM DPS falls to lower levels (around 1,000 wolves), the overall rate of dispersal is not expected to be significantly reduced. 74 Fed. Reg. at 15177. Should human-assisted migration management actions become necessary, these management measures are easy to accomplish, are proven effective, and will occur should problems ever arise. 74 Fed. Reg. at 15133-35; AR09_37222-37224 (Groen et al. 2008)); AR09_37872, 37950, 37973 (McDonald 2008); AR09_36980 (Fritts and Carbyn 1995).
- 169. "Given the NRM populations' current high genetic diversity, proven connectivity, the strong tendency of wolves to outbreed (choose mates not related to themselves), large area and distribution of core refugia, the vast amounts of suitable habitat, and future management options, including agency-managed genetic exchange, the NRM wolf population will not be threatened by lower genetic diversity in the foreseeable future." 74 Fed. Reg. at 15178.
- 170. FWS determined that "the NRM wolf population is not now and will not ever be threatened by genetic diversity issues," 74 Fed. Reg. at 15133, and the NRM wolf population represents a 400-mile southern range expansion of a vast

contiguous wolf population that numbers 12,000 in western Canada and about 65,000 across all of Canada and Alaska, *id.* at 15140.

E. FWS's Identification Of Wyoming As Constituting A Significant Portion Of The NRM DPS's Range

- 171. FWS concluded that the State of Wyoming constitutes a significant portion of the NRM DPS's range. 74 Fed. Reg. at 15153.
- 172. FWS explained that a portion of a species' range is significant if it is part of the current range of the species and contributes substantially to the representation, resiliency, or redundancy of the species. 74 Fed. Reg. at 15180-81.
- 173. "[I]n considering significance, the Service asks whether the loss of this portion likely would eventually move the species toward extinction, but not to a point where the species should be listed as threatened or endangered throughout all of its range." 74 Fed. Reg. at 15153.
- 174. FWS determined that the State of Wyoming is critical to the establishment and maintenance of a viable NRM wolf population. 74 Fed. Reg. at 15181.
- 175. Habitat in Wyoming contributes to the resiliency of the DPS because it contains large blocks of high-quality protected habitat, and the wolves in this area are robust, contributing to the DPS's ability to recover from periodic disturbance. 74 Fed. Reg. at 15181.
- 176. Further, Wyoming contains approximately 25% of the NRM DPS range, 17% of the DPS's total suitable habitat, 25% of the NRM DPS population, a third of the minimum population recovery goal, and the majority and core population within the Greater Yellowstone Area recovery area, thereby contributing to the redundancy of the DPS. 74 Fed. Reg. at 15181.
- 177. Wyoming contains habitat with unique ecological settings that result in some unique or unusual wolf behavior and contribute to the representation of the

- DPS. 74 Fed. Reg. at 15181; 15182 (presence of bison resulting in unique, learned group hunting behavior); AR09_37751-37758 (Leonard et al. 2005).
- 178. FWS also determined that threats to wolves are geographically limited to the State of Wyoming. Managing human-caused mortality remains the primary challenge to maintaining a recovered wolf population. 74 Fed. Reg. at 15182.
- 179. The threats to the NRM DPS are also geographically concentrated in Wyoming, as Wyoming's regulatory framework does not adequately regulate human-caused mortality; thus federal protections are necessary to adequately conserve wolves in Wyoming. 74 Fed. Reg. at 15182-83.
- 180. FWS determined that, the entire State "shall be considered a significant portion of the range with the understanding that different portions of the range contribute different biological benefits. This boundary: Encompasses the area where threats are sufficient to result in a determination that a portion of a DPS' range is significant, and is endangered or threatened; clearly defines the portion of the range that is specified as threatened or endangered; and does not circumscribe the current distribution of the species so tightly that opportunities to maintain recovery are foreclosed. Retaining the Act's protections Statewide also is inclusive of the area where a lack of threat management results in biological differences in status (i.e., it covers the State's entire predatory animal area)." 74 Fed. Reg. at 15183.

F. Consideration Of Unoccupied Habitat As A Significant Portion Of The DPS's Range

181. FWS assessed whether unoccupied habitat in the eastern portion of the DPS's habitat constituted a significant portion of the DPS's range. *See* 74 Fed. Reg. at 15183-84 (considering portions of the DPS north of I-90 and east of I-15 in Montana, south of I-84 in Idaho, and the DPS's habitat in Washington, Oregon,

and Utah); *id.* at 15159 (finding unoccupied habitat between core recovery areas is considered occupied habitat in the rule).

- 182. FWS considered whether the habitat meaningfully contributes to the representation, resiliency, and redundancy to the DPS. 74 Fed. Reg. at 15183. FWS found that this portion of the range does not meaningfully contribute to the resiliency of the DPS because, for instance, the habitat does not contain large blocks of suitable habitat and is not capable of containing a population that can contribute to the resiliency of the DPS. *Id.* at 15183-84.
- 183. The unoccupied portion of the DPS's range also contains about eight percent theoretically suitable wolf habitat and is not capable of containing a population that meaningfully contributes to the geographic representation and redundancy of the NRM DPS. 74 Fed. Reg. at 15184; AR09_38172 (Oakleaf et al. 2006).
- 184. This portion of the range does not contain wolves that are genetically, morphologically, or physiologically unique, nor does this range contain wolves that exhibit behavior indicative of local adaptations that contribute to the diversity and therefore overall redundancy of the NRM DPS. 74 Fed. Reg. at 15184.
- 185. Wolves that do occur in these areas will be appropriately regulated, allowing the habitat to contribute to the conservation of the NRM DPS, however minor. 74 Fed. Reg. at 15184. "With only a minor contribution the resiliency, redundancy, and representation of the NRM DPS, [FWS] determine[d] these areas are not a significant portion of the range in the NRM DPS." *Id.* at 15184.

G. Future Monitoring And Oversight.

186. Mandatory status reviews, and if necessary emergency re-listing, occur if: (1) the wolf subpopulation in any state dropped below ten breeding pairs and 100 wolves; (2) any state had less than 15 breeding pairs and 150 wolves for three consecutive years; or (3) threats to the wolf population's recovered status

increased significantly, for instance due to changes in state laws or management plans that appeared to make the laws, regulations, or plans inadequate. 74 Fed. Reg. at 15186.

- 187. FWS provided changed "management objectives" that "would significantly increase the threat to the wolf population" will trigger an immediate status review under 16 U.S.C. § 1533(g). 74 Fed. Reg. at 15186.
- 188. The States and FWS will continue to monitor wolves and publish interagency annual wolf reports for at least five years, and FWS will post its independent analysis of these reports annually. 74 Fed. Reg. at 15185-15186.

DATED this 23rd day of November, 2009

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CERTIFICATE OF SERVICE

I certify that on the 23rd day of November, 2009, the Department of Justice served copies of the attached document by CM/ECF or first class mail, postage prepaid, to counsel of record.

/s/ Michael R. Eitel
Trial Attorney